Hazardous Materials Incident Reporting



Multimodal Conference July 29th & 30th, 2014 Nashville, Tennessee Yolanda Y. Braxton, MPA

Agenda



PHMSA Mission & Vision

PHMSA's mission is to safeguard people and the environment from hazardous materials transportation risks

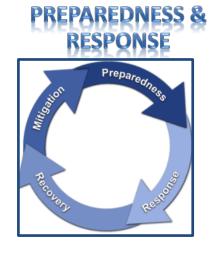


PHMSA's vision is that **no harm** results from hazardous materials transportation

Outcome Goals









GOAL: Reduce the number of death and injury incidents

GOAL: Achieve full compliance with efficient, relevant laws and regulations

GOAL: Increase community awareness of hazmat risks and reduce consequences of incidents

GOAL: Balance
the need for
safety with
economic growth
& technological
advancements

Did you know...

- What is the most common mistake on the form?
 - A. Whether or not material was shipped under a Special Permit
 - **B. Classification of Packaging Type**
 - C. Misreporting of a public evacuation
 - D. Providing correct combination of Identification Number and Proper Shipping Name

2

- •How many hours after an incident occurs must it be reported to the NRC (assuming it meets the conditions of 171.15)?
 - A. 12 hours
 - B. 24 hours
 - C. 72 hours







Which section of the 5800.1 form is most often omitted?

- A. Report Type
- **B.** General Incident Information
- C. Description of Events and Package Failure
- D. Damages

Incidents

"Think before you ship!"



What is an Incident?



An unintentional release of a hazardous material or discharge of hazardous waste; a cargo tank with a capacity of 1,000 gallons or greater containing any hazardous material that suffers structural damage to the lading retention system; or an undeclared hazardous material.





When is a DOT 5800.1 Form required?

- 49 CFR Parts 171-180 requires certain types of incidents be reported.
- Section 171.15 requires an immediate telephonic report be filed within 12 hours of certain hazmat incidents.
 - 1. A person is killed
 - 2. Injury requiring admittance to the hospital
 - 3. Evacuation of general public for one hour or more
- 4. One or more major transportation arteries are closed for one hour or more
 - 5. Operational flight plan is altered
 - 6. Fire, breakage, spillage involving radioactive material
 - 7. Fire, breakage, spillage involving an infectious substance
- 8. Release of marine pollutant in a quantity exceeding 450 liters for liquid or 400 kilograms for solids



When is a DOT 5800.1 Form required?

Section 171.16 requires that a 5800.1 report be submitted within 30 days of discovery of any of the following:

- 1. An incident that was reported under 171.15
- 2. An unintentional release of a hazardous material during transportation
 - 3. Release of a hazardous waste
 - 4. Undeclared shipment with no release is discovered
- 5. A Specification Cargo Tank 1,000 gallons or greater containing hazardous materials that received structural damage to the lading retention system and did not have a release.



When is a DOT 5800.1 Form required?

Examples to Clarify When to Report Structural Damage to a Specification Cargo Tank

Incident Report Required	No Incident Report Required
Damage to an outlet valve that affects seating and requires replacement.	Handle broken or knocked off valve – but otherwise undamaged.
Serious damage that, if worse, could have resulted in the loss of contents of the cargo tank.	Serious damage that, even if worse, would not have resulted in the loss of contents of the cargo tank.
Cargo tank damage that requires professional inspection or recertification to ensure it is capable of meeting requirements.	Minor damage that obviously will not affect continuation of the cargo tank in service.
Cargo tank damage that requires immediate or subsequent repair because of questions about cargo tank integrity.	Cargo tank damage that requires repair for cosmetic reasons only.



When is a DOT 5800.1 Form not required?

You are *not required* to report a release of hazardous material if **ALL** of the following apply:

- ■The shipment is not being offered for transportation or being transported by air;
- ■None of the Criteria in 171.15(a) applies;
- •The material is not a hazardous waste;
- ■The material is properly classed as an ORM-D, or a Packing Group III material in Class or Division 3,4,5,6.1, 8 or 9;
- ■Each package has a capacity of less than 20 liters (5.2 gallons) for liquids or less than 30 kg (66 pounds) for solids;
- ■The total aggregate release is less than 20 liters (5.2 gallons) for liquids or less than 30 kg (66 pounds) for solids;
- ■The material does not meet the definition of an undeclared hazardous material in 171.8; and
- The shipment is an undeclared material discovered in an air passenger's checked or carry-on baggage during the airport screening process.

How is a 5800.1 Form filed?

Currently, reporters have several options for submission:

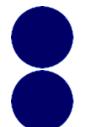
■Paper forms (both handwritten and typed) can be submitted via postal mail or email using a fillable Adobe Acrobat file

Electronic submissions

- •via PHMSA'S Website utilizing the online fillable form
- •via authorized entities using extensible mark-up language (XML) files, which is a set of rules for encoding documents in machine-readable form



U.S. Department of Transportation What Data Do We Collect Via the 5800.1? Pipeline and Hazardous Materials What Data Do We Collect Via the 5800.1?



Who, What, Where, and When

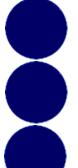
Characteristics of the release:

- Material
- Packaging
- Hazard Communication
 - Handling





Causation









Who must complete the 5800.1 Form?

- •If a hazmat incident occurs, any entity in possession of the hazmat during transportation – including loading, unloading and storage incidental to transportation – must report the incident if certain conditions are met.
- The Entity having physical control of the shipment is responsible for completion and submission of DOT Form 5800.1
 - Carrier
 - Shipper
 - Facility
 - Other





Housekeeping

- Am I required to update the information in the Report?
 - How long must I keep a copy of the report?
 - Where must I keep a copy of the report?

A death results from injuries caused by a hazardous material;

ces

ACE

Misidentification of hazardous material or packaging information in the original report;

Must make available

Damages or related costs that were not known at the time the report was filed become known;

St

Revised estimates of damages, losses, and related costs result in a change of \$25,000 or more or 10% of the original costs estimates.

Safety Administration

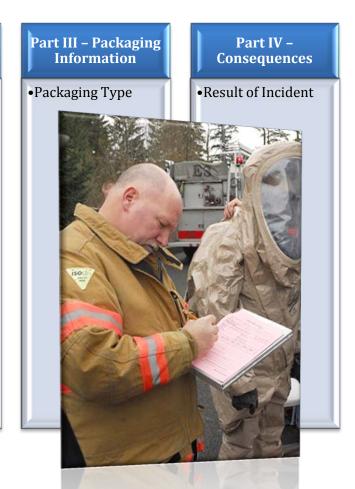
Important Fields to be Completed

Part I - Report Type

- A hazardous material incident
- •An undeclared shipment with no release
- A specification cargo tank 1,000 gallons or greater containing any hazardous materials that (1) received structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system and (2) did not have a release

Part II – General Incident Information

- Date, Time & Location of Incident
- Carrier & Shipper Information in its entirety
- Proper Shipping Name of Hazardous Material
- Hazardous Class/Division
- •Identification Number
- Quantity Released (if applicable)





Pipeline and Hazardous Materials

Safety Administration

Important Fields to be Completed

Part I – Report Type specifies the *type of incident* you are reporting.

Part II – General Incident
Information requires
information about when
and where the incident
took place, who the
carrier & shipper were,
and what hazmat was
involved.

Part III – Packaging Information contains information specific to packaging – including package type, material, size, and failure code(s).

Part IV – Consequences asks about *impacts* of the incident, including personal injuries, property damages and emergency response.

PART I - REPORT	ГТҮРЕ				
1. This is to report:		A) A hazardous material inci	dent	B) An undeclared	shipment with no release
		 C) A specification cargo tank (1) received structural danger 	nage to the lading rete	ntion system or damage	ge that requires repair to a system
		intended to protect the lac	fing retention system a	and (2) did not have a r	release.
		4			
DADT II. OFNED	AL INCIDENT IN	CODMATION			
3. Date of Incident:			Incident (use 24-ho	our time):	
	onse Center Report N	_			
		al DOT agency, enter the			
7. Location of Incident		County:	State:	ZIP Code	e (if known):
		port/Body of Water/River			
8. Mode of Transporta	_		Highway		Water
9. Transportation Phase		In Transit	Loading	Unloading	☐ In Transit Storage
10. Carrier/Reporter	Name Street				
	City			State Z	IP Code
	Federal DOT ID Num	ber	Hazmat R	egistration Number	
11. Shipper/Offeror	Name				
11. Shippel/Oneloi	Street				
	City			State Z	IP Code
	Waybill/Shipping Pa	per	Hazmat R		
12. Origin	Street				
(if different from shipper address)	City			State Z	IP Code
13. Destination	Street				
	City			State Z	IP Code
14 Proper Shinning N	ame of Hazardous Mate	erial:			
15. Technical/Trade Na					
16. Hazardous Class/			10 Parkins		O
Division:	17. Identifi Numbe		18. Packing Group:	19.	Quantity Released:
PART III - PACKA	GING INFORMA	TION			
24. Check Packaging T	ype check only one - if	more than one, list type	of packaging, copy i	Part III, and complet	e for each type:
■ Non-bulk	■ IBC	□ Carg	o tank Motor Vehicle	e (CTMV)	■ Tank Car
Cylinder	□ RAM	☐ Porta	ble Tank		☐ Other
25. See instructions an	d enter the appropriate	failure codes found at th	e end of the instruc	tions. Be sure to ent	ter the codes from the list
		~			
PART IV - CONS	EQUENCES				
30. Result of Incident (check all that apply):	Spillage Fir	e Explosion	■ Material E	ntered Waterway/Storm Sew
		■ Vapor (Gas) Dispers			

Note: It is important to complete as many fields as possible. Fields highlighted in red are essential to complete for efficient processing of the report.

0	et of 1 organization scarcing, Materials stration	Hazardous N Incident R		Form Aggresser (1866 No. 2707)	-
According to the Paper add OMB control num mandatory and self tol			of to spopped to a collect alon collection is \$107.00	ton of information unless I displays o ISB. The Ming out of this information	
Safety Administration, one is supervise chair Office of Heatershop MI	(Mice of House's us Mill of paper, identifying the exercis Wallacia of His	tearnets Salarin, CHM-62, Would by prints surround	ington, D.C. (1910)E-(1921) mark. Copies of this form: any spectrum, you can o	portation, Pipeline and Historitos Mar Expose provided for any faeth is necked and instructions, can be alterned from ontact the Historitos Minerals Informa-	12
PART I - REPORT	TYPE				
1. This is to report	0	At A hardening material motion		runderland dispract with to stoom	
		© A quarticular cargo lark 1/ Ill resolved drasted dening litterated is protect the lasting		ring are hasnibus malande fluid dan or damage fluid regulter regult to a st U not fame a rations.	-
2. Indicate whether the	e inc	Acceptanged 0	A conformation feature of	report - Additional Pages	
PART 8 - GENER	AL INCIDENT I	MFORMATION			
B. Date of Incident	-	4 Time of to	cident lune (M. hour time)	ė.	
S. Erear National Res	sonse Center Report 1	Number of applicables			_
C. Free material at	ment to mother but	and DOT spenos, enter the sa	percy and report number		
A. Location of Inciden	Chr	County	Drate	29 Code (Fitnesse)	_
		continue of Materilles W			_
a. Work of Transports	etion []		men D to	D mor	_
8. Transportation Phys	- / 0	about 0	contra D pro	native C a Transit Storie	
M. Carrier/Reporter	State				
	Street				
	City		Date	29 Code	=
	Federal TOTIO No.	rise	Harriet Regional	on Number	_
EE, Uniquest, Planter	Rome				_
	[rest				_
	City			2P (nb	_
	West Strapping 5	dia.	- remaining requires	an Armine	_
SE Crisco	Stract				_
strappe address	City		State .	29 Code	_
18. Destination	Strict				_
	00	_	Date	ZP Code	-
M. Proper Dispoing N		turist .			_
M. Tachnical Trade No.	and the same of th				_
M. Harandon Chem. (Instante	Name -	Marian Inc. Str. Str. 2008	Federal Group Federalis	N. Cuertly National District Management (18)	-
26. Was the material o	opped as a hazardno	resol 0 to 0 to	Face, provide the S	74 Montae Norther	_
att. In this w Tools by I	halation (Thi) materi	e7 0 % 0 %	o If you, provide the N	meri Iran	_
	Pripaged under an Ever	martion, Approved, or Compare	and the state of the state of the	0 - 0 -	
	Compton, Approval.	or Oknomber	a agroup (process)		_
	land haterbox mate			0 == 0 ==	_





Important Fields to be Completed



U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration

Hazardous Materials Incident Report

Form Approval OMB No. 2137-0039

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

INSTRUCTIONS: Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a seperate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at http://hazmat.dot.gov. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at http://hazmat.dot.gov.

PART I -	KEPO	KII	YPE
----------	------	-----	-----

1. This is to report:	A) A hazardous material incident B) An undeclared shipment with no release
	C) A specification cargo tank 1,000 gallons or greater containing any hazardous materials that (1) received structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system and (2) did not have a release.
2. Indicate whether this is:	An initial report A supplemental (rollow-up) report Additional Pages





3. Date of Incident:		4. Tim	ne of Incide	nt (use 24-h	nour time): 📘			
5. Enter National Response	Center Report Number (if applicable):						
	17 1	V		3.5				
20 . Was the material shipped as a	a hazardous waste?	Yes Yes	■ No	lf γes, p	rovide the E	PA Manifest N	lumber:	
21. Is this a Toxic by Inhalation (7	IH) material?	Yes	□ No	If yes, p	rovide the H	azard Zone:		
22. Was the material shipped und	er an Exemption An	nroval or C	omnetent	Authority	Certificate?	Yes	■ No	
.z. mas the material shipped und	or an exemption, Ap	provai, or o	ompotent.	Authority.	Oct (III cate:	1e3	140	
If yes provide the Evenntion	Approval or CA nur	nher:						
If yes, provide the Exemption	Approval, or CA nur	nber:						
8 (98 (46))								
05 (08 (08)) 33 (a 10)						☐ Yes	□ No	
25 (02 (02)) 33 (3 (0)						☐ Yes	□ No	
23. Was this an undeclared hazar		nent?	Page 1				- W.	m is permitte
23 . Was this an undeclared hazar		nent?	Page 1				No No on of this form	m is permitted
23. Was this an undeclared hazar Form DOT F 5800.1 (01-2004)	dous materials shipn	nent?	Page 1				- W.	m is permitted
23. Was this an undeclared hazar Form DOT F 5800.1 (01-2004) Shipper address, 13. Destination Stre	dous materials shipn	nent?	Page 1			Reproducti	on of this for	m is permitted
23. Was this an undeclared hazar Form DOT F 5800.1 (01-2004) Shipper address, 13. Destination Stre	dous materials shipn	nent?	Page 1		State		on of this for	m is permitted
23. Was this an undeclared hazar Form DOT F 5800.1 (01-2004) Shipper address, 13. Destination Stre	dous materials shipn	nent?	Page 1		State	Reproducti	on of this for	m is permitted
23. Was this an undeclared hazar Form DOT F 5800.1 (01-2004) 3110 Destination Stre	dous materials shipn	nent?	Page 1		State	Reproducti	on of this for	m is permitted
Form DOT F 5800.1 (01-2004) Shipper address, 13. Destination Stre City 14. Proper Shipping Name of	dous materials shipn	nent?	V (7 - 1) ()	acking	State	Reproducti	on of this for	m is permitted



U.S. Department of Transportation

Pipeline and Hazardous Materials

Pipeline and Hazardous Materials Safety Administration

	If valve or device		Manufacturer:				A
		F		The restriction of the second			-
		· 		The second second second			
						o.m:	
					V, Portable Tank, or Cylinde		
				- 12 222 CSC	ufacture Date: Test Date:		-1
2	8.Provide packaging	construction and tos	information, as appr	opriate:			
-	Number Failed:	2		Num	ber Failed:		
2	Number in Shipm	nent:		Num	ber in Shipment:		-
1	Amount in Packa	ige:		Amo	unt in Package:		
	Package Capacit	y:		Pack	age Capacity:		
that c Enter		or Outer Packaging:	дианиту.	Sing	le Package or Inner Pack	aging (if any):	ient.
See ii	1934 131 - 131 - 131	age capacity and the		I Noil - Removable			list
L		truction: Re	311	Non - Removable	erial of Construction:		
-					**************************************		
		r Outer Packaging:			le Package or Inner Pack		
RT 2	6b. For Non-bulk, IBC complete the foll		packaging, if identifi	cation markings are	incomplete or unavailable	e, see instructions and	
DT	(Examples: 1A1/Y1.4	4/150/92/USA/RB/93/RL,	JN31H1/Y0493/USA/M93	339/10800/1200, DOT	- 105A - 100W (RAIL), DOT 4	06 (HIGHWAY), DOT 51, DOT	3-A)
		Altheorem Dates Lett					



3a. Did the hazardous mater		•	☐ Ye:	s 🔲 No	
Fatalities:		g from the hazardous mater ογees R			General Public
36. Was a major transportati	ion artery or facility	closed?	☐ Ye	es 🔲 No	If γes, how manγ? (hou
37. Was the material involve	ed in a crash or dera	ailment?	□ Y	es 🔲 No	
lf γes, provide the follow	ving information:	Estimated speed (mph):	: W	/eather condit	ions:
		Vehicle overturn?	☐ Ye	es 🔲 No	
		Vehicle left roadwaγ/tra	ick?	es 🔲 No	
5. טום the nazardous materi	ai cause or contribu	te to an evacuation?	■ Ye	s 🔲 No	
lf γes, provide the followi	ng information:				

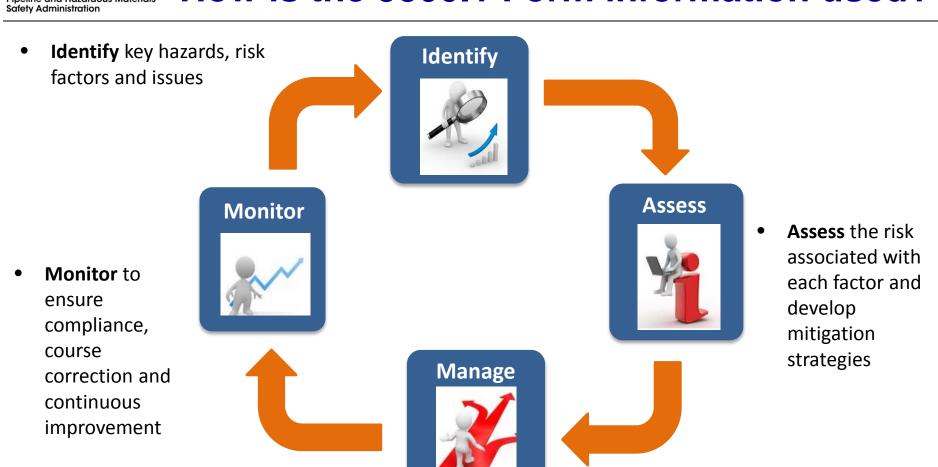




PART	PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE									
Describ including the dur necession	procedures) to he control of your in	Ip prevent recurr	ence. Provide recon y. Continue on addit	nmendations for	Iditional training, use of better packaging, or improved operating r improvement to hazardous materials transportation beyond the necessary.	package failure, cation. Estimate onal sheets if				
	Contact's Title: Business Name an	Type or Print):	ONWATION		Fax Number: () Hazmat Registration Number (if not already provided):					
	Preparer is:	☐ Carrier	☐ Shipper	☐ Facility	☐ Other					
2	Form DOT F 5800	.1 (01-2004)		Page	4 Reproduction of this form is permitted					

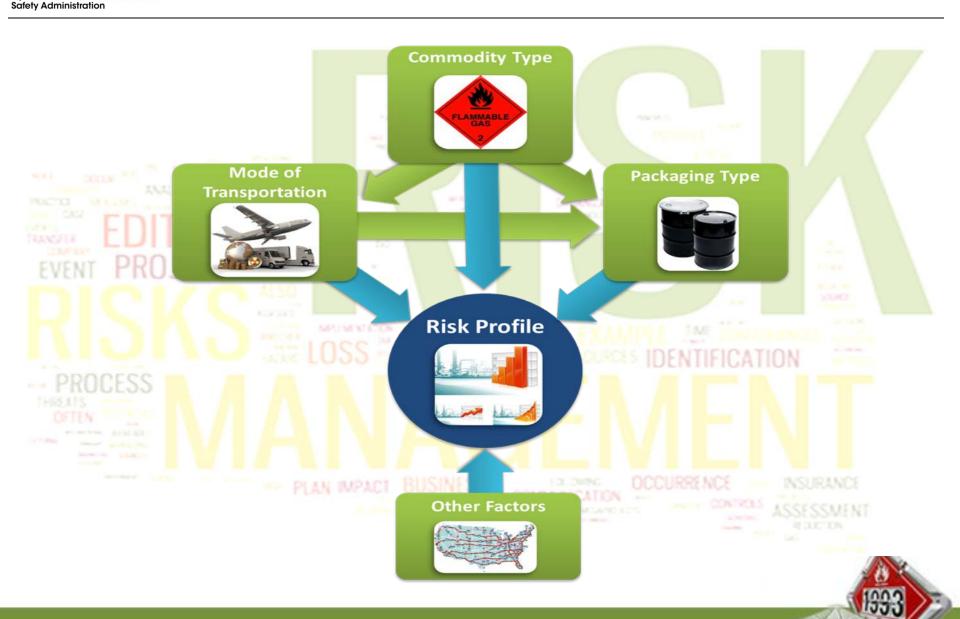


How is the 5800.1 Form information used?



 Manage the risk through implementation of strategies and communication with stakeholders Pipeline and Hazardous Materials

How is the 5800.1 Form information used?



Safety Administration

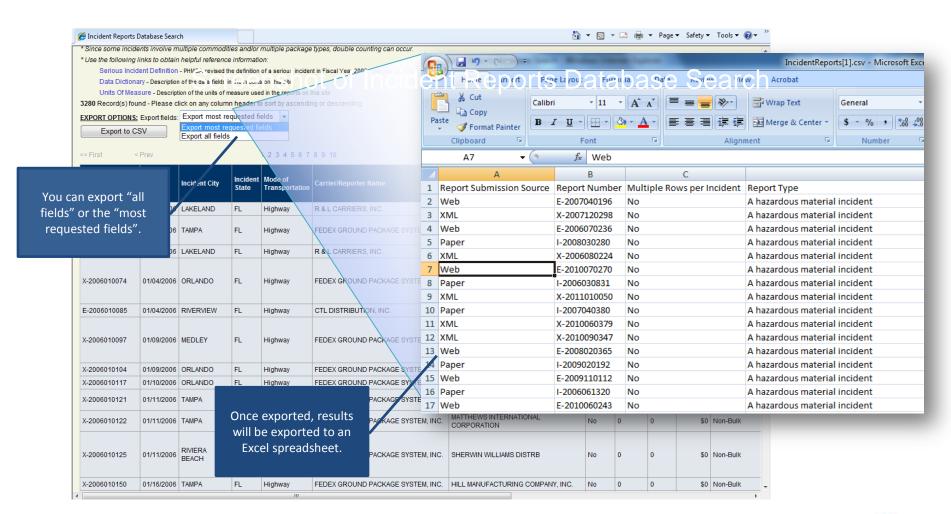
Trends and Statistics

	CHIMSA Office	of Hazardous Mater	ials Safety	Incident Reports Da	tabase Search		
If you are not searching for a specific incident, you		e: Hazmat Intelligence P		partment of Transportation. D	PHM	SA Hazmat Hom	
may enter a date range to	3. Date of Incident:	From: 01/01/2008		To: 12/31/2012	(mm/dd	(mm/dd/yyyy)	
view a certain amount of	7. Location of Incident:	City:	(begins)	State: Oklahoma 🔻	Zip Code:	(contains	
months/years of data		Incident Route:	(3)	o nanoma		(contains	
months, years or data	8. Mode of Transportation:	Air Highway Rail	Water Oth	nor.		(
	9 Transportation Phase:	In Transit Loading					
			Unloading	n Transit Storage		/aaataina	
	10. Carrier/Reporter	Name:		State: Select ▼	Zip Code:	(contains	
	44 Ohionos/Offices	Name:		State: Select ▼	Zip Code.	(contains	
	11. Shipper/Offeror12. Origin:		(contains)	State: Calant	7in Codo:	(contains	
		City:	(contains)	State: Select ▼	Zip Code:	(contains	
Select one or more modes	if you ardous Class/Divisi	of Hazardous Material:	:>	47 Idealification Number		(contains	
want to filter your results to	show - PACKAGING INFO		egins)	17. Identification Number:		(contains	
incidents only for that mo			argo Tank Motor \	/ehicle (CTMV) Tank Car			
*Note: To view all modes, leave	this field	Cylinder RAM P	_	Other			
blank.		What Failed:		(contains) How Failed:		(contains)	
	dent Cause:	Causes of Failure:				(contains)	
	PART IV - CONSEQUENCES	<u>.</u>					
	30.Result of Incident:	Spillage 🔲 Fir	е	Explosion Material Ent	ered Waterway/Storm Sew	er	
		Vapor(Gas) Dispersion 🔲 En	vironmental Dam	age 🔲 No Release			
	33a. Did the hazardous ma	terial cause or contribute to a h	uman fatality?	Select ▼ 36. Was a major transpo	ortation artery or facility clos	ed? Select ▼	
	34. Did the hazardous mate	erial cause or contribute to pers	sonal injury?	Select ▼ 37. Was the material inve	olved in a crash or derailm	ent? Select ▼	
	35. Did the hazardous mate	erial cause or contribute to an e	vacuation?	Select ▼			
	OTHER						
	Report Number:	(contains)	Serious Incident:	Select ▼			
	Container Code Detail:	(contains)	Undeclared Shipr	ment: Select ▼			
	General Package Type: S	elect ▼					
	DISPLAY OPTIONS: Display	y 50 ▼ results per page.					
	Clear	Search					

Only select State if you are searching for information on one particular state



Trends and Statistics







Incident Report Statistics

Available Reports

- Yearly Incident Summary Reports
 - Casualty Classification
 - Transportation Phase
 - Incidents by Results
 - Incidents Cause by Mode
 - Incident by Hazard Class
 - Incidents by Commodity Rank
 - Undeclared Incidents by State
 - Bulk Containers
 - Incidents by State
 - Serious Incidents Map

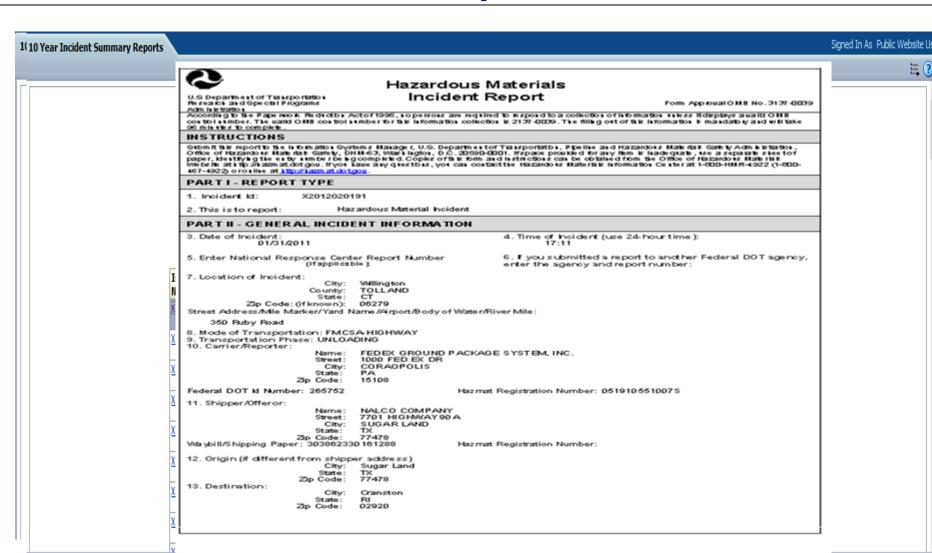
- 10 Year Incident Summary Reports
 - All Incidents
 - Accident/Derailment Incidents
 - RAM Incidents
 - Waste Incidents
 - Serious Incidents (Old definition)
 - Serious Incidents (Current definition)
 - Undeclared Incidents
 - Bulk Incidents
 - Non-Bulk Incidents



Safety Administration

Pipeline and Hazardous Materials

Incident Report Statistics



Form DOT F 5800.1 (01-2004)

Reproduction of this form is permitted

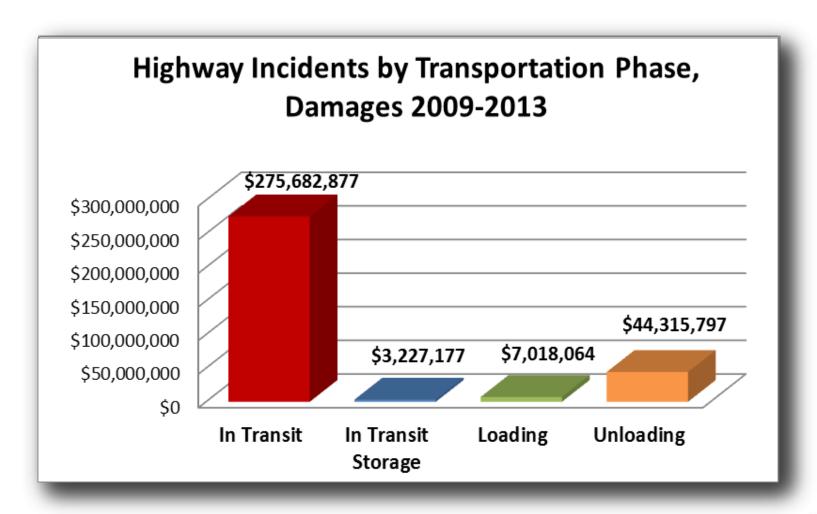


Benefits



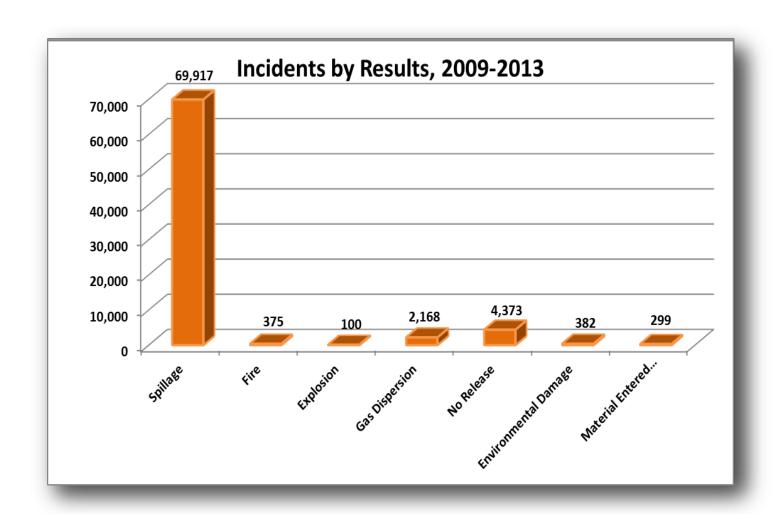
- Easy navigation
- •Up-to-date data
- •Graphs that can be changed by individual users
- Ability to sort columns and filter reports (yearly summary reports only)
- Ability to download data into Excel, PowerPoint, etc.
- ■Map displaying total # of serious incidents by each state

Incident Statistics for All States



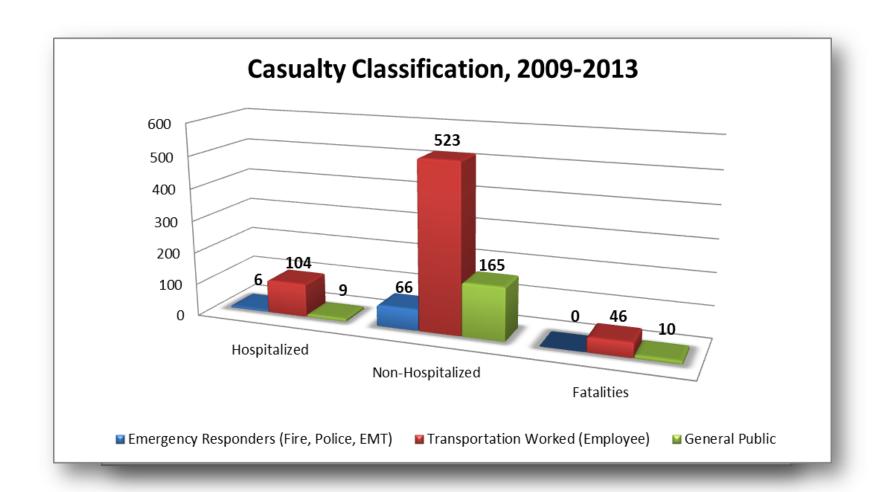


Incident Statistics for All States





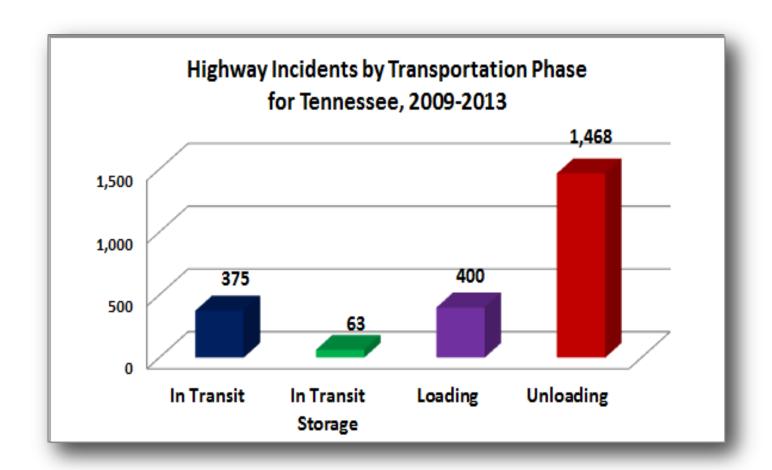
Incident Statistics for All States





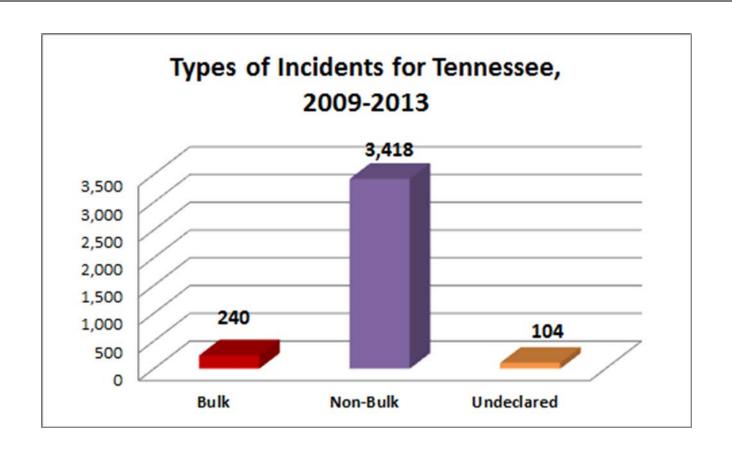


Incident Statistics for Tennessee





Incident Statistics for Tennessee

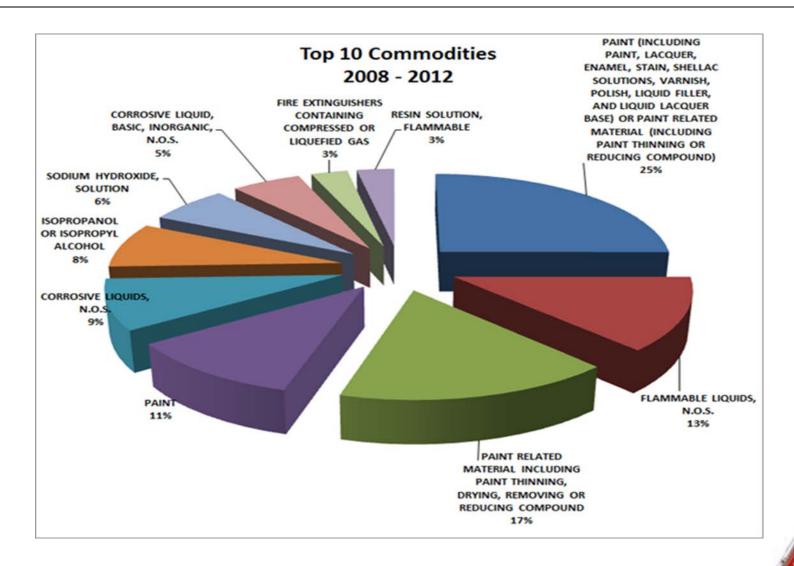




Pipeline and Hazardous Materials

Safety Administration

Top 10 Commodities for Past 5 Years



Incident Contact Information

- Hazardous Materials Information Center800-647-4922
- Yolanda Braxton, MPAPHMSA HMIS Operations Manager/Program Analyst
 - Yolanda.Braxton@dot.gov
 - **•202-366-0460**
- General Email Inquiries
 - •HM_Requests@dot.gov





Questions?



